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EXAMINER

LE, MIRANDA

ART UNIT

PAPER NUMBER

2167

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/669,311	Applicant(s) ALLEN, WAYNE J.	
	Examiner Miranda Le	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to Amendment, filed 04/05/07.

Claims 1-23 are pending in this application. Claims 1, 9, 13, 21 are independent claims.

This action is made Final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4-10, 13, 16-21 are rejected under 35 U.S.C. 102(e) as being anticipated by

Wang (US Pub. No. 20020159463).

Wang anticipated independent claims 1, 9, 13, 21 by the following:

As per claim 1, Wang teaches a method comprising:

querying a file (*i.e. the requests from any new system that looks up the server list for a particular service on this network, [0045]; definition of service will be defined in the description of message format, [0049]*) that defines a protocol for which protocol support is to be added to a network traffic generation (*i.e. the traffic flow between the client and the physical server,*

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[0045]) and analysis tool (*i.e. parse the packet, [0049]*) to process network traffic ([0045; 0049; 0058; 0059; 0061]);

determining from the queried file how packets for the protocol are constructed (*i.e. The specification of a flow is totally determined by the server, i.e. dependent server application requirement, [0058]*); and

building a protocol runtime specification based on how packets for the protocol are constructed (*i.e. The specification of a flow is totally determined by the server, i.e. dependent server application requirement, [0058]*), wherein the network traffic generation and analysis tool is configured to process network traffic in accordance with the protocol runtime specification ([0045; 0049; 0058; 0059; 0061]).

As per claim 9, Wang teaches an apparatus comprising:

a storage element to store a file (*i.e. definition of service will be defined in the description of message format, [0049]*) that defines a protocol for which protocol support is to be added to a network traffic generation and analysis tool to process network traffic ([0045; 0049; 0058; 0059; 0061]); and

a translation unit (*i.e. Network Address Translation, [0045]; the address translation service, [0049]*) coupled to the storage element to query the file to determine how packets for the protocol are constructed and to build a protocol runtime specification for the protocol (*i.e. The specification of a flow is totally determined by the server, i.e. dependent server application requirement, [0058]*), wherein the network traffic generation and analysis tool (*i.e. parse the*

packet, [0049]) is configured to process network traffic in accordance with the protocol runtime specification ([0045; 0049; 0058; 0059; 0061]).

As per claim 13, Wang teaches an article of manufacture comprising a machine accessible medium (Fig. 1) including content that when accessed by a machine causes the machine to:

querying a file (i.e. the requests from any new system that looks up the server list for a particular service on this network, [0045]; definition of service will be defined in the description of message format, [0049]) that defines a protocol for which protocol support is to be added to a network traffic generation (i.e. the traffic flow between the client and the physical server, [0045]) and analysis tool (i.e. parse the packet, [0049]) to process network traffic ([0045; 0049; 0058; 0059; 0061]);

determining from the queried file how packets for the protocol are constructed (i.e. The specification of a flow is totally determined by the server, i.e. dependent server application requirement, [0058]); and

building a protocol runtime specification based on how packets for the protocol are constructed (i.e. The specification of a flow is totally determined by the server, i.e. dependent server application requirement, [0058]), wherein the network traffic generation and analysis tool is configured to process network traffic in accordance with the protocol runtime specification ([0045; 0049; 0058; 0059; 0061]).

As per claim 21, Wang teaches a system comprising:

a storage element to store a file (*i.e. definition of service will be defined in the description of message format, [0049]*) that defines protocol support is to be added to a network traffic generation and analysis tool to process network traffic (*[0045; 0049; 0058; 0059; 0061]*);

a translation unit (*i.e. Network Address Translation, [0045]; the address translation service, [0049]*) coupled to the storage element to query the file to determine how packets for the protocol are constructed and to build a protocol runtime specification for the protocol (*i.e. The specification of a flow is totally determined by the server, i.e. dependent server application requirement, [0058]*), wherein the network traffic generation and analysis tool (*i.e. parse the packet, [0049]*) is configured to process network traffic in accordance with the protocol runtime specification (*[0045; 0049; 0058; 0059; 0061]*);

a network interface coupled to the transaction unit (*i.e. the systems of the present invention include intermediate system, end system, and supervisor system. The IS (intermediate system) is IP router or switch kind of device that receives traffic from outside, and forward it to the end system, [0045]*); and

a network driver coupled to the network interface (*i.e. the systems of the present invention include intermediate system, end system, and supervisor system. The IS (intermediate system) is IP router or switch kind of device that receives traffic from outside, and forward it to the end system, [0045]*).

As per claim 4, Wang teaches the method of claim 1, wherein determining from the queried file how packets for the protocol are constructed comprises determining whether there are one or more protocol encapsulations (*i.e. HTTP server, FTP server, firewall proxy server,*

IPSEC tunneling server and NAT (Network Address Translation) server etc, [0045]; A server could also use this message to redirect the user request to other better server node based on the service configuration or other requirement, [0056]).

As per claim 5, Wang teaches the method of claim 1, wherein determining from the queried file how packets for the protocol are constructed comprises determining a field type of one or more fields for the protocol (*i.e. For assigned numbers, within this layer two network, there are numerous parameters, such as IP addresses, under same IP address the TCP or UDP port number, certain fields in layer three to layer seven header or content and many others need to be controlled and managed, [0065]).*

As per claim 6, Wang teaches the method of claim 1, wherein determining from the queried file how packets for the protocol are constructed comprises determining a field size of one or more fields for the protocol (*i.e. Service type matching rule is variable length that is defined in later section. Server address is 8 byte field, the first two bytes determine it's MAC address or IP address. 00 00 is MAC, 00 01 is IP, [0101]).*

As per claim 7, Wang teaches the method of claim 1, wherein determining from the queried file how packets for the protocol are constructed comprises determining a default value of one or more fields for the protocol (*i.e. Service type matching rule is variable length that is defined in later section. Server address is 8 byte field, the first two bytes determine it's MAC address or IP address. 00 00 is MAC, 00 01 is IP, [0101]).*

As per claim 8, Wang teaches the method of claim 1, wherein determining from the queried file how packets for the protocol are constructed comprises determining whether there is a calculation to be performed for one or more fields of the protocol (*i.e. Supervisor system may calculate the average response time based on each server's latest current response time within the interval that the supervisor system sent to its parent supervisor system, [0099]*).

As per claim 10, Wang teaches the apparatus of claim 9, further comprising a network interface couple to the translation unit (*i.e. the systems of the present invention include intermediate system, end system, and supervisor system. The IS (intermediate system) is IP router or switch kind of device that receives traffic from outside, and forward it to the end system, [0045]*).

As per claim 16, Wang teaches the article of manufacture of claim 13, wherein the machine accessible medium including content that when accessed by the machine causes the machine to determine from the queried file how packets for the protocol are constructed comprises the machine accessible medium including content that when accessed by the machine causes the machine to determine whether there are one or more protocol encapsulations (*i.e. HTTP server, FTP server, firewall proxy server, IPSEC tunneling server and NAT (Network Address Translation) server etc, [0045]; A server could also use this message to redirect the user request to other better server node based on the service configuration or other requirement, [0056]; The specification of a flow is totally determined by the server, i.e. dependent server application requirement, [0058]*).

As per claim 17, Wang teaches the article of manufacture of claim 13, wherein the machine accessible medium including content that when accessed by the machine causes the machine to determine from the queried file how packets for the protocol are constructed comprises the machine accessible medium including content that when accessed by the machine causes the machine to determine a field type of one or more fields for the protocol (*i.e. For assigned numbers, within this layer two network, there are numerous parameters, such as IP addresses, under same IP address the TCP or UDP port number, certain fields in layer three to layer seven header or content and many others need to be controlled and managed, [0065]*).

As per claim 18, Wang teaches the article of manufacture of claim 13, wherein the machine accessible medium including content that when accessed by the machine causes the machine to determine from the queried file how packets for the protocol are constructed comprises the machine accessible medium including content that when accessed by the machine causes the machine to determine a field size of one or more fields for the protocol (*i.e. Service type matching rule is variable length that is defined in later section. Server address is 8 byte field, the first two bytes determine it's MAC address or IP address. 00 00 is MAC, 00 01 is IP, [0101]*).

As per claim 19, Wang teaches the article of manufacture of claim 13, wherein the machine accessible medium including content that when accessed by the machine causes the machine to determine from the queried file how packets for the protocol are constructed comprises the machine accessible medium including content that when accessed by the machine

causes the machine to determine a default value of one or more fields for the protocol (*i.e.*

Service type matching rule is variable length that is defined in later section. Server address is 8 byte field, the first two bytes determine it's MAC address or IP address. 00 00 is MAC, 00 01 is IP, [0101]).

As per claim 20, Wang teaches the article of manufacture of claim 13, wherein the machine accessible medium including content that when accessed by the machine causes the machine to determine from the queried file how packets for the protocol are constructed comprises the machine accessible medium including content that when accessed by the machine causes the machine to determine whether there is a calculation to be performed for one or more fields of the protocol (*i.e. Supervisor system may calculate the average response time based on each server's latest current response time within the interval that the supervisor system sent to its parent supervisor system, [0099]).*

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 2, 3, 11, 12, 14, 15, 22, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (US Pub. No. 20020159463), in view of Harvey et al. (US Patent No. 7,054,924).

As per claim 2, 11, 14, 22, Wang does not expressly teach the file is written in an Extensible Markup Language (XML).

Harvey teaches the file is written in an Extensible Markup Language (XML) (*See Table 2, col. 16*).

It would have been obvious to one of ordinary skill of the art having the teaching of Wang and Harvey at the time the invention was made to modify the system of Wang to include the file is written in an Extensible Markup Language (XML) as taught by Harvey. One of ordinary skill in the art would be motivated to make this combination in order to configuration and management of computer network devices in view of Harvey (*See FIELD OF INVENTION*), as doing so would give the added benefit of having automatic network provisioning accomplished, without requiring a skilled technician to visit customer premises to carry out configuration as taught by Harvey (*col. 2, lines 51-65*).

As per claim 3, 12, 15, 23, Wang does not specifically teach the method of claim 1, further comprising determining from the file how to display one or more user interface elements.

Harvey teaches determining from the file how to display one or more user interface elements (*Figs. 4-7*).

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It would have been obvious to one of ordinary skill of the art having the teaching of Wang and Harvey at the time the invention was made to modify the system of Wang to include determining from the file how to display one or more user interface elements as taught by Harvey. One of ordinary skill in the art would be motivated to make this combination in order to display any part of the configuration file to the user in view of Harvey (*col. 24, lines 35-47*), as doing so would give the added benefit of having automatic network provisioning accomplished, without requiring a skilled technician to visit customer premises to carry out configuration as taught by Harvey (*col. 2, lines 51-65*).

Response to Arguments

6. Applicant's arguments filed 04/05/07 have been fully considered but they are not persuasive.

(1) Rejection of Claims 1, 4-10, 13 and 16-21 under 35 USC 102(e) over Wang.

Wang teaches "a protocol that defines how packets are constructed" in the following paragraph:

[0049] A service is described by pattern matching rule, which allows the intermediate system that parses the packet based on these rules to determine a match. Hence the intermediate system does not have to be "application aware" as long as it can execute the pattern matching rule that usually can be done by very fast network processor. The fields to be parsed will sometimes need to include not just the destination, but also the source information for a service. One example is the address translation service that will check both the source address

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and destination address to determine whether address translation is needed. A more precise definition of service will be defined in the description of message format.

Note that, the step of “**determining**” in claim 1 equates to “*parses the packet*”.

The “**a protocol that defines how packets are constructed**” of claim 1 equates to “*to determine whether address translation is needed*”.

For the reasons set forth above, it is the examiner’s belief that the protocol of Wang is the same as the protocol that defines how packets are constructed. The description in Wang is applicable to the problem solved by the present invention of adding support for new protocols to a network traffic generation and analysis tool. Accordingly, the rejection of Claims 1,4-10, 13 and 16-21 under 35 USC §102(e) sustains, as Wang does support such rejection as discussed.

(2) Rejection of claims 2, 3, 11, 12, 14, 15, 22 and 23 under 35 USC 103(a)

Applicant seems to be questioning whether the Wang and Harvey references are combinable to reasonably establish the prima facie case of obviousness under 35 USC 103.

In response to the preceding arguments, the examiner submits that in order for references to be combinable to reasonably establish the prima facie case of obviousness under 35 USC 103, they must be analogous and within the same field of endeavor and both references direct to the same field as providing network configuration protocol for communication between systems in network environment.

a. Contrary to applicant's argument, Wang does disclose **the file that defines the protocol** as recited in independent Claims 1, 13, and 21, from which Claims 2, 3, 11, 12, 14, 15, 22 and 23 depend, under the same rationale as provided in (1). The fact that applicant has

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recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious.

See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Further, Applicant has made a piecemeal analysis of the references. Applicant is therefore reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine Wang and Harvey in arriving at the instant invention, because:

b. Harvey teaches **protocol** as *a configuration service receives a request from a network device to provide configuration information, (col. 2, line 66 to col. 3, line 20).*

It should be noted that *configuration information* equates to **protocol** in claim 1.

Harvey teaches the XML file for carrying out network device provisioning and configuration, and communication of other information to a network device automatically and in an assured manner (*col. 2, lines 44 to col. 3, line 20*).

Harvey also teaches the XML file as *a configuration service receives a request from a network device to provide configuration information. The configuration service retrieves a template representing the configuration from a storage location, e.g., a directory service. The configuration service also retrieves one or more parameter values specific to the device. Device-specific values are instantiated for the generic parameters in the template, based on the retrieved values. The resulting configuration is stored in XML format using XML tags to delimit*

configuration commands. A reliable transport carries the configuration information to the device. At the device, a configuration agent syntax checks the embedded configuration information, and then applies the configuration information to the device. As a result, automatic network provisioning may be accomplished, without requiring a skilled technician to visit customer premises to carry out configuration. The process may be integrated with an event service to enable multiple devices to concurrently receive re-configuration without special synchronization logic, col. 2, line 66 to col. 3, line 20).

c. Harvey further teaches “determining from the queried file how packets for the protocol in the request written in an XML” in col. 14, lines 13-36 as recited below:

GET/Config/config.asp?DeviceID=CNSAD.sub.--7200.sub.--1

*In one specific embodiment, active server pages are used and each ASP is identified in the request. Such **HTTP** requests have the form:*

***http://<srv-name-or-ip-address>/config.html?DeviceID=demoRouter &?User=Joe&Password=xsxs;** where DeviceID specifies a unique identifier which will be used to identify the device configuration template in the directory. Optionally, a User value and a Password value are provided to access Directory 110.*

*In another embodiment, the format of such a request is: **http://<srv-ip-address>/config/config.asp?DeviceID=<deviceID>***

*or **http://<srv-ip-address>/servlets/config?DeviceID=<deviceID>***

*where srv-ip-address is the **IP** address of a server such as Web server 206 that has one or more ASP pages or servlets are installed. For example, a request may be:*

http://10.10.1.1/config?DeviceID=c7200.

Therefore, it would have been obvious to one of ordinary skill of the art having the teaching of Wang and Harvey at the time the invention was made to modify the system of Wang to include the limitations as taught by Harvey.

One of ordinary skill in the art would be motivated to make this combination in order to receive a request from the network device to provide configuration information in view of Harvey (col. 2, lines 51-65), as doing so would give the added benefit of carrying out network device provisioning and configuration, and communication of other information to a network device, automatically and in an assured manner as taught by Harvey (col. 2, lines 44-49).

Accordingly, the claimed invention as represented in the claims does not represent a patentable over the art of record. Applicant is encouraged to amend the claims to better reflect what applicant intends to claim as the invention and to overcome the prior arts.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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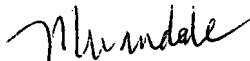
however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

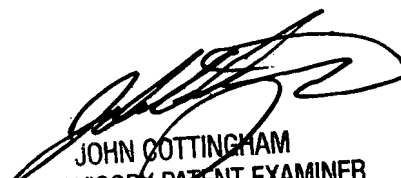
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham, can be reached on (571) 272-7079. The fax number to this Art Unit is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Miranda Le
June 21, 2007



JOHN COTTINGHAM
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